

# Liberty High School

## 2020-2021 Curriculum Guide



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**Table of Contents**

<b>Section 1 – Graduation Requirements .....</b>	<b>2-5</b>
Class of 2021 (Seniors) .....	2
Class of 2022 (Juniors).....	3
Class of 2023 (Sophomores) .....	4
Class of 2024 (Freshmen) .....	5
<b>Section 2 – Core Course Descriptions .....</b>	<b>6-13</b>
English.....	6-7
Mathematics .....	8-9
Science .....	10-11
Social Studies .....	12-14
<b>Section 3 – Elective Course Descriptions .....</b>	<b>15-31</b>
Agriscience Technology.....	15
Agritechology/Horticulture Science and Services .....	15
Army JROTC .....	15-16
Art Education .....	16-17
Athletic Training .....	17-18
Business Management and Administration.....	18
Promotional Enterprise .....	18
Communication and Technology .....	19-20
Digital Information Technology .....	19
Digital Design .....	19
Digital Video Technology.....	19-20
Driver’s Education .....	20
Education and Training .....	20-21
Early Childhood Education.....	20-21
Experiential Education .....	21-22
AVID.....	21
Leadership Skills.....	21
Executive Internship .....	22
Health Science .....	22-23
Electrocardiography Technician .....	22
Pharmacy Technician.....	22-23
Informational Technology.....	23-24
Web Development .....	23
Game Simulation/Animation Programming .....	23-24
Language Arts Electives.....	24
Music (Instrumental and Vocal).....	24-27
Physical Education .....	27-28
STEM .....	28
AP Computer Science Principles .....	28
Engineering Pathways.....	28
Theatre.....	29
World Languages .....	30-31
<b>Section 4 – Resources for Success .....</b>	<b>31</b>
<b>Section 5 – Career Pathways .....</b>	<b>32-34</b>

## 2021 Cohort - Liberty Seniors

### Credits:

- 4 English
- 4 Math (Algebra 1, Geometry, and higher)
- 3 Science (Biology and one of the other courses must have a laboratory component)
- 1 World History
- 1 U.S. History
- .5 Economics (semester course)
- .5 U.S. Government (semester course)
- 1 PE (Personal Fitness and .5 PE elective)
- 1 Fine, Performing or Practical Arts course
- 8 Electives
- \*You must take an online course

\*Two years of a World Language are not required for graduation, but are required for a Bright Futures Scholarship and entrance to a 4-year college.

### Testing:

- EOC: Algebra I (must pass with a Level 3 or higher and it counts as 30% of your final grade)
- EOC: Geometry, Biology, U.S. History (EOC counts as 30% of your final grade)
- FSA ELA: Level 3 or higher on the 10<sup>th</sup> grade test

### Important this year:

1. Continue participating in extracurricular activities and working on community service hours.
2. Make sure that you are on track for a Bright Futures Scholarship.
3. Watch College/Career Fair dates and admissions deadlines.
4. Check to see if you have met college admission requirements (ACT/SAT/GPA).

### Bright Futures Scholarship Requirements (Florida Based Scholarship)

**FAS** - Florida Academic Scholarship: 3.5 core GPA, 100 community service hours, 1330 SAT (Math and Verbal) or 29 ACT (composite), Math courses must be Algebra 1 or higher, 2 years of the same World Language

**FMS** - Florida Medallion Scholarship: 3.0 core GPA, 75 community service hours, 1210 SAT (Math and Verbal) or 25 ACT (composite), Math courses must be Algebra 1 or higher, 2 years of the same World Language

**GSV**- Gold Seal Vocational 3.0 core GPA, take at least 3 full credits in a single Career and Technical Education Program, 3.5 GPA in Career Education courses, 30 community service hours

**Core GPA includes English, Math, Science, Social Studies, and World Language  
Requirements are subject to change, see the Liberty website for details.**

You can find also additional information at [www.floridastudentfinancialaidsg.org](http://www.floridastudentfinancialaidsg.org)

## 2022 Cohort - Liberty Juniors

### Credits:

- 4 English
- 4 Math (Algebra 1, Geometry, and higher)
- 3 Science (Biology and one of the other courses must have a laboratory component)
- 1 World History
- 1 U.S. History
- .5 Economics (semester course)
- .5 U.S. Government (semester course)
- 1 PE (Personal Fitness and .5 PE elective)
- 1 Fine, Performing or Practical Arts course
- 8 Electives
- \*You must take an online course

\*Two years of a World Language are not required for graduation, but are required for a Bright Futures Scholarship and entrance to a 4-year college.

### Testing:

- EOC: Algebra I (must pass with a Level 3 or higher and it counts as 30% of your final grade)
- EOC: Geometry, Biology, U.S. History (EOC counts as 30% of your final grade)
- FSA ELA: Level 3 or higher on the 10<sup>th</sup> grade test

### Important this year

1. Register for the ACT and/or SAT tests this year.
2. Research college and career options and their requirements.
3. Continue participating in extracurricular activities and working on community service hours.
4. Track your Bright Futures Scholarship progress/status.

### Bright Futures Scholarship Requirements (Florida Based Scholarship)

**FAS** - Florida Academic Scholarship: 3.5 core GPA, 100 community service hours, 1330 SAT (Math and Verbal) or 29 ACT (composite), Math courses must be Algebra 1 or higher, 2 years of the same World Language

**FMS** - Florida Medallion Scholarship: 3.0 core GPA, 75 community service hours, 1210 SAT (Math and Verbal) or 25 ACT (composite), Math courses must be Algebra 1 or higher, 2 years of the same World Language

**GSV**- Gold Seal Vocational 3.0 core GPA, take at least 3 full credits in a single Career and Technical Education Program, 3.5 GPA in Career Education courses, 30 community service hours

**Core GPA includes English, Math, Science, Social Studies, and World Language  
Requirements are subject to change, see the Liberty website for details.**

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## 2023 Cohort - Liberty Sophomores

### Credits:

- 4 English
- 4 Math (Algebra 1, Geometry, and higher)
- 3 Science (Biology and one of the other courses must have a laboratory component)
- 1 World History
- 1 U.S. History
- .5 Economics (semester course)
- .5 U.S. Government (semester course)
- 1 PE (Personal Fitness and .5 PE elective)
- 1 Fine, Performing or Practical Arts course
- 8 Electives
- \*You must take an online course

\*Two years of a World Language are not required for graduation, but are required for a Bright Futures Scholarship and entrance to a 4-year college.

### Testing:

- EOC: Algebra I (must pass with a Level 3 or higher and it counts as 30% of your final grade)
- EOC: Geometry, Biology, U.S. History (EOC counts as 30% of your final grade)
- FSA ELA: Level 3 or higher on the 10<sup>th</sup> grade test

### Important this year:

1. You must pass the 10<sup>th</sup> grade FSA ELA test in the Spring.
2. Make sure that you are involved in a club, sport, and/or extracurricular activities.
3. Continue working on community service hours.
4. Interested in Dual Enrollment please your Guidance Counselor

### Bright Futures Scholarship Requirements (Florida Based Scholarship)

**FAS** - Florida Academic Scholarship: 3.5 core GPA, 100 community service hours, 1330 SAT (Math and Verbal) or 29 ACT (composite), Math courses must be Algebra 1 or higher, 2 years of the same World Language

**FMS** - Florida Medallion Scholarship: 3.0 core GPA, 75 community service hours, 1210 SAT (Math and Verbal) or 25 ACT (composite), Math courses must be Algebra 1 or higher, 2 years of the same World Language

**GSV**- Gold Seal Vocational 3.0 core GPA, take at least 3 full credits in a single Career and Technical Education Program, 3.5 GPA in Career Education courses, 30 community service hours

**Core GPA includes English, Math, Science, Social Studies, and World Language  
Requirements are subject to change, see the Liberty website for details.**

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## 2024 Cohort - Liberty Freshmen

### Credits:

- 4 English
- 4 Math (Algebra 1, Geometry, and higher)
- 3 Science (Biology and one of the other courses must have a laboratory component)
- 1 World History
- 1 U.S. History
- .5 Economics (semester course)
- .5 U.S. Government (semester course)
- 1 PE (Personal Fitness and .5 PE elective)
- 1 Fine, Performing or Practical Arts course
- 8 Electives
- \*You must take an online course

\*Two years of a World Language are not required for graduation, but are required for a Bright Futures Scholarship and entrance to a 4-year college.

### Testing:

- EOC: Algebra I (must pass with a Level 3 or higher and it counts as 30% of your final grade)
- EOC: Geometry, Biology, U.S. History (EOC counts as 30% of your final grade)
- FSA ELA: Level 3 or higher on the 10<sup>th</sup> grade test

### Important for this year

1. This is an important year for your GPA; make sure that you are getting As, Bs, and Cs.
2. This is also a good time to start your community service hours for scholarships
3. It is important to get involved with your school; find a club, sport, and/or extracurricular activity to become a part of your school
4. Listen to the upperclassmen, they will tell you to make every year count.

### Bright Futures Scholarship Requirements (Florida Based Scholarship)

**FAS** - Florida Academic Scholarship: 3.5 core GPA, 100 community service hours, 1330 SAT (Math and Verbal) or 29 ACT (composite), Math courses must be Algebra 1 or higher, 2 years of the same World Language

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**GSV**- Gold Seal Vocational 3.0 core GPA, take at least 3 full credits in a single Career and Technical Education Program, 3.5 GPA in Career Education courses, 30 community service hours

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## Core Course Descriptions

### English: 4 Credits Required

#### **10013100 - ENGLISH I**

The purpose of this course is to provide students with instruction in English language skills. The course content includes the study of grammar and writing skills, speaking and listening skills, and reading and analyzing skills. A research paper/project is required.

Prerequisite: 8<sup>th</sup> grade FSA ELA Level 1, 2, or 3

#### **10013200 - ENGLISH HONORS I**

The purpose of this course is to promote academic excellence in Language Arts through enriched experiences in literature, writing, speaking, and listening. Course content includes a review of grammar usage and fundamentals of composition, critical analysis of the various literary forms in both oral and written assignments. A research paper/project is required.

Prerequisite: 8<sup>th</sup> grade – FSA ELA Level 3, 4 or 5

#### **10013400 - ENGLISH II**

The purpose of this course is to provide instruction in English language skills, in the study of world literature, and in the development of composition skills. Course content includes grammar, vocabulary, reference skills, media, public speaking, and writing. A research paper/project is required.

Prerequisite: English I - FSA ELA Level 1, 2, or 3

#### **10013500 - ENGLISH HONORS II**

The purpose of this course is to provide integrated educational experiences in the language arts strands of reading, writing, listening, viewing, speaking, language, and literature. The content should include, but not be limited to the following: using reading strategies to construct meaning from texts, acquiring an extensive vocabulary through reading, discussion, listening, and systematic word study, using speaking, listening, and viewing strategies in formal presentations and informal discussions, understanding and responding to a variety of literary forms by using language successfully.

Prerequisite: Successful completion English I Honors or English I – FSA ELA Level 3, 4, or 5

#### **10013700 - ENGLISH III**

This course includes the frequent writing of papers, on a variety of topics using a variety of methods. American literature studied through the analysis of various genres, along with instruction in listening, reading, discussing, and writing.

Prerequisite: English II - FSA ELA Level 1, 2, or 3

#### **10013200 - ENGLISH III HONORS**

The purpose of this course is to provide integrated educational experiences in the language arts strands of reading, writing, listening, viewing, speaking, language, and literature. The content should include, but not be limited to the following: using reading strategies to construct meaning from texts, acquiring an extensive vocabulary through reading, discussion, listening, and systematic word study, using speaking, listening, and viewing strategies in formal presentations and informal discussions, understanding and responding to a variety of literary forms by language successfully to influence the reader.

Prerequisite: Successful completion English II Honors or English II – FSA ELA Level 3, 4, or 5

#### **10014200 - ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION**

This course provides students with the understanding of semantic, structural, and rhetorical resources of the English language as they relate to the principles of effective writing. The course also provides a variety of writing opportunities calling for the use of different style and tones. Summer reading is required prior to the start of the school year. College credit can be earned by student successful performance (3 or better) on the Advanced Placement exam administered in May. An action research project is required.

Grades 10, 11, 12

Prerequisite: Successful completion of English Honors II – FSA ELA Level 3, 4 or 5

**10014050 – ENGLISH IV**

The purpose of this course is to provide students with the skills to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text. Students will be able to cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. Topics to be covered are: Key ideas and details, craft and structure, range and level of text complexity, text types and purposes, production and distribution of writing, research to build knowledge, conventions in writing and speaking as well as vocabulary acquisition and use.

Prerequisite: English III - FSA ELA Level 1, 2, or 3

**10014100 - ENGLISH IV HONORS**

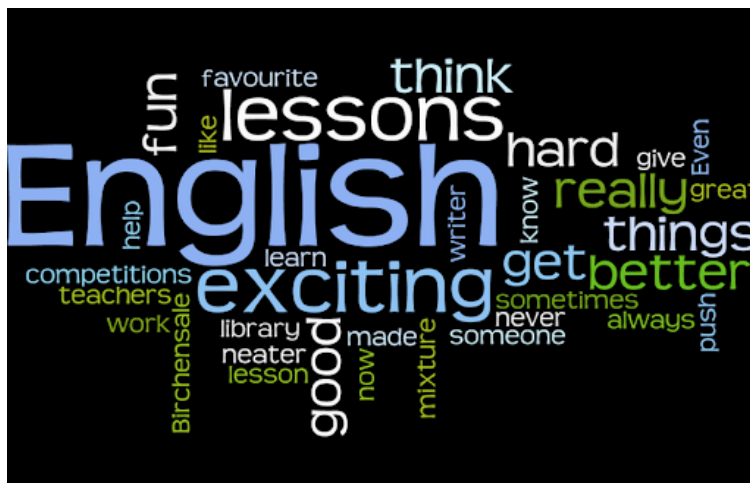
The purpose of this course is to provide integrated educational experiences in the language arts strands of reading, writing, listening, viewing, speaking, language, and literature. The content should include, but not be limited to, the following: using the reading process to construct meaning using technical, informative, and imaginative texts, using writing processes for various purposes with attention to style and format, using the research process and individual inquiry to locate, analyze, and evaluate information, using effective listening, speaking, and viewing strategies in informal and formal situations understanding the power of language as it impacts the audience, understanding and analyzing literary texts responding critically and aesthetically to literature.

Prerequisite: Successful completion of English III or English III Honors – FSA ELA Level 3, 4, or 5

**10014300 - ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION**

This course engages students in the careful reading and critical analysis of imaginative literature. Students will develop critical standards for interpreting the effects writers create by means of the artful manipulation of language. Individual works, and their characters will be studied. Summer reading is required prior to the start of school year. College credit can be earned by student successful performance (3 or better) on the Advanced Placement exam administered in May.

Prerequisite: Successful completion English Honors III or AP Language and Composition - FSA ELA Level 3, 4 or 5





**Mathematics: 4 Credits Required****12003100 - ALGEBRA I**

This course provides students with the foundation for more advanced mathematics courses and aims to develop the skills needed to solve mathematical problems. Course content includes sets, variables, real number systems, equations and inequalities, relations and functions, graphs, rational and irrational numbers, and radicals. Students are required to pass an End of Course (EOC) exam to meet graduation requirement. Algebra EOC exam will count towards 30% of student's overall grade.

Grades 9

Prerequisite: None

**12003200 - ALGEBRA I HONORS**

This course provides students with the foundation for more advanced mathematics courses and to develop the skills needed to solve mathematical problems. Course content includes sets, variables, real number systems, equations and inequalities, relations and functions, graphs, rational and irrational numbers, and radicals. This course is more in-depth and at an advanced pace. Students are required to pass an End of Course (EOC) exam to meet graduation requirement. Algebra EOC exam will count towards 30% of student's overall grade.

Grades 9

Prerequisite: Successful completion of Advanced 8<sup>th</sup> grade Math – Grade 8 FSA Math Level 3, 4, or 5

**1207300- LIBERAL ARTS MATH 1**

This course will revisit key concepts from Algebra 1 and incorporate concepts from Geometry to prepare you for your mathematical future. The course is delivered through text, interactives, and videos that incorporate the Florida Standards for Mathematical Practice as well as Florida Standards for Mathematical Content.

Grade 10

Prerequisite: Algebra 1 – Algebra 1 EOC Level 1 or 2

**12063100 - GEOMETRY**

This course emphasizes critical thinking involving the discovery of relationships and their proofs, and skill in applying the deductive method to mathematical situations. Course content includes logic and reasoning, the study of Euclidean geometry of lines, planes, triangles, similarity and congruence. Geometry EOC exam will count towards 30% of student's overall grade.

Grades 9, 10

Prerequisite: Successful completion of Algebra I - Algebra I EOC Level 3, 4, or 5

**12063200 - GEOMETRY HONORS**

This course provides a rigorous in-depth study of geometry, with emphasis on methods of proof and the formal language of mathematics. Content includes the structure of geometry, separation properties, angle concepts, triangles, quadrilaterals, proofs, similar polygons, circles and spheres, volume and transformational geometry. Geometry EOC exam will count towards 30% of student's overall grade.

Grades 9, 10

Prerequisite: Successful completion of Algebra I Honors - Algebra I EOC Level 3, 4, or 5

**12003300 - ALGEBRA II**

This course provides students with a foundation for applying advanced skills to other mathematical and scientific fields. Content includes linear and quadratic equations, factoring of polynomials, graphing, systems of equations, and rational/irrational functions.

Grades 9, 10, 11, 12

Prerequisite: Successful completion of Geometry - Geometry EOC Level 1 or 2

**12003400 - ALGEBRA II HONORS**

This course presents an in-depth study of the topics of Algebra II, with emphasis on theory, proof, and development of formulas and their application. This is a rigorous study of functions, graphs, and the tools needed to study advanced mathematics.

Grades 9, 10, 11, 12

Prerequisite: Successful completion of Geometry Honors - Geometry EOC Level 3, 4, or 5

**12023400 – PRE-CALCULUS HONORS**

This course emphasizes the skills necessary for the study of theorems of polynomial behavior, the relationships among the solutions of equations, understand mathematical induction, trigonometric functions and their applications.

Grades 10, 11, 12

Prerequisite: Successful completion Algebra II or Algebra II Honors

**12007000 - MATH FOR COLLEGE READINESS**

The purpose of this course is to strengthen the skill level of high school seniors who have completed Algebra I and Geometry who need some additional instruction in content to prepare them for success in college level mathematics. This course incorporates the Florida Standards for Mathematical Practices as well as the following Florida Standards for Mathematical Content: Expressions and Equations, The Number System, Functions, Algebra, Geometry, Number and Quantity, Statistics and Probability, and the Florida Standards for High School Modeling. The standards align with the Mathematics Postsecondary Readiness Competencies deemed necessary for entry-level college courses.

Grades 11, 12

Prerequisite: Successful completion of Algebra I and Geometry

**1298310 – ADVANCED TOPICS IN MATHEMATICS**

This course introduces students to advanced functions, with a focus on developing a strong conceptual grasp of the expressions that define them. Additionally, students will be exposed to topics necessary for advanced mathematics such as conic sections, complex numbers, trigonometry, and probability. Throughout the course, students will learn through discovery and application, developing the skills they need to break down complex challenges and demonstrate their knowledge in new situations.

Grades 10, 11, 12

Prerequisite: Successful completion Algebra II or Algebra II Honors

**12103000 – PROBABILITY & STATISTICS WITH APPLICATIONS HONORS**

This course teaches the mathematical science involved in the application of quantitative principles to collect, analysis, and present numerical data.

Grades 11, 12

Prerequisite: Successful completion of Algebra II Honors or Pre-Calculus

**12023100- ADVANCED PLACEMENT CALCULUS AB**

This is a college level course designed to prepare students for the Advanced Placement exam. This course studies elementary functions and the general theory and techniques of calculus, which include limits, derivatives and integrals. College credit can be earned by successful performance (3 or above) on the Advanced Placement exam administered in May.

Grades 11, 12

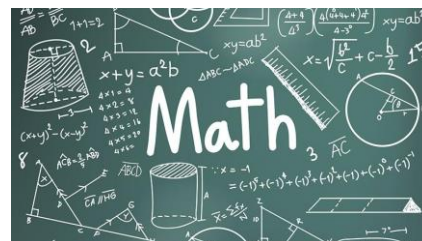
Prerequisite: Successful completion of Pre-Calculus

**1210320 – ADVANCED PLACEMENT STATISTICS**

This course is designed to provide college-level instruction on the concepts and tools for working with data. Students collect and analyze data and draw conclusions based on real-world information. The course challenges students to explore patterns, think critically, use a variety of tools and methods, and report their findings and conclusions.

Grades: 11, 12

Prerequisite: Successful completion of Algebra II Honors



**Science: 3 Credits Required****20013400 – ENVIRONMENTAL SCIENCE**

This course is an overview of the scientific study of the natural world and how people influence it. Major topics include: food, energy, human population, biodiversity and global change. Course will prepare students for biology.

Grade: 9

Prerequisite: None

**20003100 - BIOLOGY I**

This course provides students with general exploratory experiences and activities in the fundamental concepts of life. Content includes scientific method, scientific measurement, laboratory safety and use of apparatus, cell biology, cell reproduction, basic principles of genetics, and classification and surveying of plants and animals. Biology EOC exam will count towards 30% of student's overall grade.

Grades: 10 - FSA ELA Level 1 or 2

**20003200 - BIOLOGY I HONORS**

This course is designed for upper level students and includes the study of scientific method and measurement, laboratory safety and use of apparatus, biochemistry, cell biology, cell reproduction, genetics, classification, taxonomy, and ecological relationships. Biology EOC exam will count towards 30% of student's overall grade.

Grades: 9, 10

Prerequisite: FSA ELA Level 3, 4, or 5

**20033400 - CHEMISTRY I**

This course provides students with the study of the composition, properties, and changes associated with matter. Content includes classification and structure of matter, atomic theory, the periodic table, bonding, chemical formulas, chemical reactions and balanced equations, the behavior of gases, physical changes, acids, bases, and salts, and energy associated with physical and chemical changes.

Grades: 10, 11, 12

Prerequisite: Successful completion of Biology I and Algebra I - FSA ELA Level 1 or 2

**20033500 - CHEMISTRY I HONORS**

This course provides students with a rigorous study of the composition, properties, and changes associated with matter. Content includes atomic structure, bonding, the periodic table, formulas, stoichiometry, phase changes, specific heat, equilibrium, solutions, acids, bases, and salts, nuclear chemistry, gas laws, and organic chemistry. There is an emphasis on tests in this class, and a research project is required.

Grades: 9, 10, 11, 12

Prerequisite: Successful completion of Biology I Honors and Algebra I Honors - FSA ELA Level 3, 4, or 5

**20003600 - ANATOMY AND PHYSIOLOGY HONORS**

This course provides students with exploratory and advanced activities in the structure and function of the components of the human body. Content includes cellular processes and tissues, the skeletal, muscular, nervous, cardiovascular, respiratory, digestive, urinary, and reproductive systems, and special senses.

Grades: 11, 12

Prerequisite: Successful completion of Biology I

**20033800 - PHYSICS I**

Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course.

Grades: 10-12

Prerequisite: Successful completion of Algebra I and Biology I

**20033900 - PHYSICS I HONORS**

This course is designed for upper-level students to study in-depth with enrichment concepts, theories, and laws governing the interaction of matter, energy, and forces, and their application through exploratory investigations and activities.

Grades: 10-12

Prerequisite: Successful completion of Algebra I Honors and Biology I Honors

**2002510 - MARINE SCIENCE HONORS**

While the content focus of this course is consistent with the Marine Science I course, students will explore these concepts in greater depth. In general, the academic pace and rigor will be greatly increased for honors level course work. It is a comprehensive science that incorporates oceanography and an introduction to marine biology. Course content includes biological, chemical, and physical aspects of Ocean environment, marine plant and animal life, marine ecology, and human interaction with the marine community.

Grade: 11, 12

Prerequisite: Successful completion of Biology I and Chemistry I

**20034210/20023400 - ADVANCED PLACEMENT PHYSICS /EXP. SCIENCE I HONORS**

This is a rigorous study of the main principles of classical and modern physics with an emphasis on problem solving. The AP Program specifies content. College credit can be earned by successful performance (3 or above) on the Advance Placement exam administered in May. Double block class – 2.0 credits

Grade: 11, 12

Prerequisite: Successful completion of Algebra II and Physics I or Chemistry I

**20013800 - ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE**

The purpose of this course is to study the interaction of man with the environment. The content includes scientific analysis of fundamental principles and concepts about the interdependence of Earth's systems, population dynamics, distribution, ownership, and degradation of renewable and nonrenewable resources, environmental quality, global changes and their consequences, and environment and society trade-offs and decision-making choices for the future. College credit can be earned by successful performance (3 or above) on the Advanced Placement exam administered in May.

Grade: 10-12

Prerequisite: Successful completion of Biology I and Chemistry I

**20003400/20004400 - ADVANCED PLACEMENT BIOLOGY/GENETICS HONORS**

This course provides a study of the facts, principles, and processes of biology and the collection, interpretation, and formulation of hypotheses from available data. The A.P. Program specifies content. College credit can be earned by successful performance (3 or above) on the Advanced Placement exam administered in May. Double block class – 2.0 credits

Grade: 10-12

Prerequisite: Successful completion of Biology I Honors and Chemistry I Honors

**20033700/20004400 - ADVANCED PLACEMENT CHEMISTRY/CHEMISTRY II HONORS**

This is a rigorous study of the development and application of chemistry principles and concepts. The purpose of this course is to study the development and application of chemistry principles and concepts. Content includes structure of matter, states of matter, reactions, descriptive chemistry, laboratory as well as chemical calculations and the mathematical formulations of principles. College credit can be earned by successful performance (3 or above) on the Advanced Placement exam administered in May. Double block class - 2.0 credits

Grade: 10-12

Prerequisite: Successful completion of Algebra II, Biology I and Chemistry I

**Social Studies****21034000 - ADVANCED PLACEMENT HUMAN GEOGRAPHY**

The purpose of this course is to enable students to develop higher understanding of concepts and skills related to Human Geography. The content will include the following: regions, population studies, cultural concepts and spatial representation, political geography, land use, urbanization, issues related to space, place, scale, and economic geography. College credit can be earned by successful performance (3 or above) on the Advanced Placement exam administered in May.

Grades: 9

Prerequisite: FSA ELA Level 4 or 5

**21093100 - WORLD HISTORY**

This course provides students with the opportunity to acquire an understanding of the chronological development of civilization by examining the political, economic, social, religious, military, dynastic, scientific, and cultural events that affect humanity.

Grades: 10

Prerequisite: None

**21093200 - WORLD HISTORY HONORS**

The purpose of this course is to enable students to understand their connections to the development of civilizations by examining the past to prepare for their future as participating members of a global community. Students will use knowledge pertaining to history, geography, economics, political processes, religion, ethics, diverse cultures, and humanities to solve problems in academic, civic, social, and employment settings. The content includes the following: prehistory, rise of civilization, development of religion and the impact of religious thought, evolution of political systems and philosophies, influence of significant historical figures and events, and contemporary world affairs.

Grade: 9, 10

Prerequisite: FSA ELA Level 3, 4, or 5

**21094200 - ADVANCED PLACEMENT WORLD HISTORY**

This course is designed to include the chronological period from 600 C.E. to the present with a general analysis of developments before that time. Students will develop a knowledge and understanding of the cultures of the continents and how they interacted with the world today. Content is the content specified by the Advanced Placement Program. This course uses college-level textbooks and requires considerable work outside of the classroom including outside reading and research. College credit can be earned by successful performance (3 or above) on the Advanced Placement exam administered in May.

Grades: 9, 10

Prerequisite: Successful completion of English I or English Honors I - FSA ELA Level 4 or 5

**21003100 – U.S. HISTORY**

This course provides students with the opportunity to acquire an understanding of the chronological development of the American people by examining the political, economic, social, religious, military, scientific, and cultural events that have affected the rise and growth of our nation.

Grades: 10, 11

Prerequisite: None

**21003200 U.S. HISTORY HONORS**

The purpose of this course is to enable students to understand the development of the United States within the context of history with a major focus on the post-Reconstruction period. Students will use knowledge pertaining to history, geography, economics, political processes, religion, ethics, diverse cultures, and humanities to solve problems in academic, civic, social, and employment settings.

Grades: 10, 11

Prerequisite: FSA ELA Level 3, 4, or 5

**21003300 – ADVANCED PLACEMENT U.S. HISTORY**

Students will analyze the development of the U.S. within the context of history by examining connections to the past to prepare for the future as participants in a democratic society. Students will use knowledge pertaining to history, geography, economics, political processes, religion, ethics, diverse cultures, and humanities to solve problems in academic, civic, social, and employment settings. College credit can be earned by successful performance (3 or above) on the Advanced Placement exam administered in May.

Grades: 10, 11

Prerequisite: Successful completion of World History and English 2 or English Honors 2 – FSA ELA Level 4 or 5

**21023350 – ECONOMICS (with Financial Literacy) (.5 credit)**

This course provides students the opportunity to acquire an understanding of the way in which a society organizes its limited resources to satisfy unlimited wants. The student is introduced to the major characteristics of the mixed market economic system in the United States and studies the way in which basic economic questions are answered. Includes Financial Literacy.

Grades: 11, 12

Prerequisite: Given opposite Government

**21023450 – ECONOMICS (with Financial Literacy) HONORS (.5 credit)**

This course provides students the opportunity to acquire an understanding of the way in which a society organizes its limited resources to satisfy unlimited wants. The student is introduced to the major characteristics of the mixed market economic system in the United States and studies the way in which basic economic questions are answered. Includes Financial Literacy.

Grades: 11, 12

Prerequisite: Given opposite Government Honors - FSA ELA Level 3, 4, or 5

**21023700 – ADVANCED PLACEMENT MACROECONOMICS (.5 credit)**

This course provides instruction in theory, organization, principles and functions of the national government, stressing the relationships of the individual to all levels of government in the political system and the economics course provides opportunities to acquire the knowledge and decision-making tools necessary for understanding how society must organize its limited resources to satisfy its unlimited wants. College credit can be earned by successful performance (3 or above) on the Advanced Placement exam administered in May.

Grades: 11, 12

Prerequisite: Given opposite AP Government - FSA ELA Level 4 or 5

**21063100 – U.S. GOVERNMENT (.5 credit)**

This course provides students with the opportunity to acquire an understanding of American government and political behavior. Content includes an understanding of the evolving role of political parties and interest groups in determining government policy, how the rights and responsibilities of citizens in a democratic state have evolved and been interpreted, and the importance of civic participation in the democratic political process.

Grades: 11, 12

Prerequisite: Given opposite Economics

**21063100 – U.S. GOVERNMENT HONORS (.5 credit)**

This course provides students with the opportunity to acquire an understanding of American government and political behavior. Content includes an understanding of the evolving role of political parties and interest groups in determining government policy, how the rights and responsibilities of citizens in a democratic state have evolved and been interpreted, and the importance of civic participation in the democratic political process.

Grades: 11, 12

Prerequisite: Given opposite Economics Honors - FSA ELA Level 3, 4, or 5



**21064200 – ADVANCED PLACEMENT U.S. GOVERNMENT (.5 credit)**

This course provides instruction in theory, organization, principles and functions of the national government. Students will understand the development of the United States within the context of history by examining connections to the past to prepare for the future as participating members of a democratic society. Students use knowledge pertaining to history, geography, economics, political processes, religion, ethics, diverse cultures and humanities to solve problems in academic, civic, social and employment settings. College credit can be earned by successful performance (3 or above) on the Advanced Placement exam administered in May.

Grades: 11, 12

Prerequisite: Given opposite AP Economics - FSA ELA Level 4 or 5

**21073500 - ADVANCED PLACEMENT PSYCHOLOGY**

Through the study of psychology, students acquire an understanding of and an appreciation for human behavior, behavioral interaction, and the progressive development of individuals. This will better prepare them to understand their own behavior and the behavior of others. The content should include research methodology, biological bases of behavior, sensation and perception, states of consciousness, learning and cognition, developmental psychology, theory psychological testing, abnormal psychology, and treatment of psychological disorders. College credit can be earned by successful performance (3 or above) on the Advanced Placement exam administered in May.

Grades: 10, 11, 12

Prerequisite: FSA ELA Level 4 or 5



## Elective Course Descriptions

### AGRISCIENCE TECHNOLOGY

#### Agritechnology/ Horticulture Science and Services

##### **8106810 - AGRISCIENCE FOUNDATIONS I**

This course is designed to develop competencies in the areas of agricultural history and the global impact of agriculture; career opportunities; scientific and research concepts; biological and physical science principles; environmental principles; Agriscience safety; principles of leadership; and agribusiness, employability, and human relations skills in Agriscience. Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing and observation equipment.

*Course counts as a science credit*

Grades: 9, 10, 11, 12

Prerequisite: None

##### **8121510 – INTRODUCTORY HORTICULTURE 2**

This course is designed to develop competencies in the areas of career opportunities; global importance of agriculture; plant classification; propagation; growing media; nutritional needs; fertilization; irrigation; pest identification; pest control, pruning; plant installation; transplanting; safe hand-tool use; and employability skills.

Grades: 10, 11, 12

Prerequisite: Agriscience Foundations I

##### **8121520 – HORTICULTURE SCIENCE 3**

This course is designed to develop competencies in the areas of industry regulations; plant classification; plant transportation; soil sampling and analysis; fertilizer calculations; recording keeping; irrigation components, water quality; drainage; integrated pest management; pesticide safety and regulations; equipment calibration; chemical growth regulators; xeriscaping; integrated landscape management; safe use of power equipment; record keeping; and employability skills.

Grades: 10, 11, 12

Prerequisite: Introductory Horticulture 2

### ARMY JR. ROTC

##### **18013000- LEADERSHIP EDUCATION AND TRAINING 1**

The purpose of this course is to enable students to develop knowledge of the history, customs, traditions, and purpose of the Army Junior Reserve Officer Training Corps (JROTC). The course includes the development of basic leadership skills including leadership principles, values, and attributes. Students should master appreciation for diversity. Active learning strategies are integrated throughout the course with an emphasis on writing skills and oral communication techniques. Financial planning as well as physical fitness, diet, nutrition, healthy lifestyles, awareness of substance abuse and prevention, and basic first aid measures are included. An overview of the globe and geography and basic map reading skills are incorporated. A study of the United States Constitution, Bill of Rights, responsibilities of United States citizens, and the federal justice system is also provided.

Grades: 9, 10, 11, 12

Prerequisite: None



**18013100 - LEADERSHIP EDUCATION AND TRAINING 2**

The purpose of this course is to enable students to expand on skills taught in Leadership Education and Training 1. This course introduces the concepts of equal opportunity, fair treatment of minorities, and prevention of sexual harassment. It provides instruction on leadership skills, leadership theories, as well as the basic principles of managements. It provides self assessments that help students determine their skill sets and opportunities to teach using accepted principles and methods of instruction. It emphasizes community projects to assist in drug prevention efforts. It also includes dietary guidelines, fitness, and map reading and orienteering skills. It discusses the significant events that helped shape and develop the Constitution and government and teaches the role of political parties in the election process

Grades: 10, 11, 12

Prerequisite: Leadership Education and Training 1

**18013200 - LEADERSHIP EDUCATION AND TRAINING 3**

The purpose of this course is to enable students to expand on skills taught in Leadership Education and Training 2. This course allows cadets to investigate the interrelationships of the services while they continue to build their leadership development and decision-making skills. It includes negation skills and management principles. It emphasizes staff procedures and opportunities to handle various leadership situations as well as prevent violence and manage anger. The research, identification, planning, and execution of service learning activities are included. This course gives cadets the opportunity to apply basic concepts of strategies for career exploration and planning. It teaches how to create a career portfolio and plan for college or work. Financial management principles are studied. Skills for orienteering and/or land navigation are developed. The course also includes studies in the federal judicial system and how historical events have shaped social systems

Grades: 11, 12

Prerequisite: Leadership Education and Training 2

**18013300 - LEADERSHIP EDUCATION AND TRAINING 4**

The purpose of this course is to enable students to expand on skills taught in Leadership Education and Training 3. This course focuses on creating a positive leadership situation, negotiating, decision making, problem solving, team development, project management, and mentoring. Students will demonstrate leadership potential in an assigned command or staff position within the cadet battalion organizational structure. The course teaches cadets how to use emotional intelligence in leadership situations as well as how to maintain a positive attitude. It provides instruction on etiquette, daily planning, financial planning, and careers. It includes requirements for the practical application of leadership duties. It emphasizes physical fitness through healthy individual and group competition. The interactions between groups of people and how they affect the area's cultural, economic, and political characteristics are discussed. Concepts of democracy and freedom and their influence on local governments are also included.

Grade: 12

Prerequisite: Leadership Education and Training 3

**ART EDUCATION**

*A fee may be assessed for these classes to help cover the cost of consumable materials. All courses fulfill the fine arts requirement for graduation.*

**01043400 – DRAWING 1**

Students experiment with the media and techniques used to create a variety of two-dimensional (2-D) artworks through the development of skills in drawing. Students practice, sketch, and manipulate the structural elements of art to improve mark making and/or the organizational principles of design in a composition from observation, research, and/or imagination. Through the critique process, students evaluate and respond to their own work and that of their peers. This course incorporates hands-on activities and consumption of art materials.

Grades: 9, 10, 11, 12

Prerequisite: None

**01043500 – DRAWING 2**

Students develop and refine technical skills and create 2-D compositions with a variety of media in drawing. Student artists sketch, manipulate, and refine the structural elements of art to improve mark-making and/or the organizational principles of design in a composition from observation, research, and/or imagination. Through the critique process, students evaluate and respond to their own work and that of their peers. This course incorporates hands-on activities and consumption of art materials.

Grades: 10, 11, 12

Prerequisite: Successful completion of Drawing 1

**01113100 - SCULPTURE 1**

The purpose of this course is to provide students the opportunity to develop additional skills in the use of sculpture media, design, processes and techniques. Emphasis shall be placed on the visual, spatial, and compositional concepts to communicate a range of ideas. This course is next level of 3-D Art/Sculpture class.

Grades: 10, 11, 12

Prerequisite: Successful completion of Drawing 1

**01113200 - SCULPTURE 2**

The purpose of this course is to enable students to develop intermediate-level skills in the use of sculpture media, design, processes, and techniques. Emphasis is placed on the use of visual, spatial, and compositional concepts to communicate a range of ideas.

Grades: 11, 12

Prerequisite: Successful completion of Sculpture 1

**01093500 – ADVANCED PLACEMENT STUDIO ART 2D**

This AP course is intended to address a very broad interpretation of two-dimensional (2-D) design issues. This type of design involves purposeful decision-making about how to use the elements and principles of art in an integrative way. It is for the advanced student who wishes to seek AP credit through submitting a Portfolio of work for consideration by the College Board. The content will include the advanced study of the elements of design and the advanced study of the principles of design.

Grades: 10, 11, 12

Prerequisite: Teacher Approval Required

**ATHLETIC TRAINING****15024901 – CARE AND PREVENTION OF ATHLETIC INJURIES (.5 credit class)**

This course is offered to introduce athletic training and the career opportunities it represents. The purpose is to convey knowledge of basic taping techniques as well as human anatomy and physiology as it relates to the nature, prevention, care, and rehabilitation of athletic injuries. Students must be able to attend practices after school and attend sporting events.

Grades: 10, 11, 12

Prerequisite: **Athletic Trainer approval**, paired with Health Explorations Honors

**08003600 – Health Explorations Honors (.5 credit class)**

The purpose of this course is for students to apply health-related research practices. Experiences include discourses in major health problems in society, modern health practices, current scientific findings related to human diseases and disorders, collection, analysis and evaluation of health information, health advocacy trends, and health career.

Grades: 10, 11, 12

Prerequisite: **Athletic Trainer approval**, successful completion of Care and Prevention of Athletic Injuries



**COMMUNICATION and TECHNOLOGY****8207310 – DIGITAL INFORMATION TECHNOLOGY**

This course is designed to provide a basic overview of current business and information systems and trends, and to introduce students to fundamental skills required for today's business and academic environments. Emphasis is placed on developing fundamental computer skills. The intention of this course is to prepare students to be successful both personally and professionally in an information-based society. Digital Information Technology includes the exploration and use of databases, the internet, spreadsheets, presentation applications, management of personal information and email, word processing and document manipulation, HTML, web page design, and the integration of these programs using software that meets industry standards.

Grades: 9, 10, 11, 12

Prerequisite: None

**DIGITAL DESIGN****8209510 – DIGITAL DESIGN 1**

This course is designed to develop the entry-level skills required for careers in digital design. The content includes computer skills; digital publishing concepts and operations; layout, design, and measurement activities; digital imaging; communication, collaboration and decision-making activities; critical thinking and problem-solving.

Grades: 9, 10, 11, 12

Prerequisite: Digital Information Technology

**8209520 – DIGITAL DESIGN 2**

This course continues the development of entry-level skills required for careers in digital design. The content includes computer skills; digital publishing operations; layout, design, and measurement activities; digital imaging; communication, collaboration and decision-making activities; critical thinking and problem solving.

Grades: 10, 11, 12

Prerequisite: Digital Design 1

**8209530 – DIGITAL DESIGN 3**

This course continues the development of industry-standard skills required for careers in digital design. The content includes the use of software and equipment to perform digital publishing and digital imaging activities. Students continue to learn about communication, collaboration and decision-making activities, critical thinking and problem solving.

Grades: 11, 12

Prerequisite: Digital Design 2

**8209540 – DIGITAL DESIGN 4**

This course is designed to develop advanced industry-standard skills required for careers in digital design. The content includes the use of software and equipment, including digital video cameras and video/audio editing software.

Grades: 12

Prerequisite: Digital Design 3

**DIGITAL VIDEO TECHNOLOGY****8201400 - DIGITAL VIDEO TECHNOLOGY 1**

This course provides students with an introduction to the digital video production process; content includes safe work practices, planning a production set, designing lighting plans, camera operation, and audio/ video recording, mixing, and editing.

Grades: 9, 10, 11, 12

Prerequisite: Digital Information Technology

**8201420 - DIGITAL VIDEO TECHNOLOGY 2**

This course provides students with intermediate level instruction in the digital video production process.

Grades: 10, 11, 12

Prerequisite: Digital Video Technology 1

**8201430 - DIGITAL VIDEO TECHNOLOGY 3**

Students will participate in the digital video pre-production, production, and post-production processes.

Grades: 11, 12

Prerequisite: Digital Video Technology 2

**8201440 - DIGITAL VIDEO TECHNOLOGY 4**

Students will demonstrate proficiency in all phases of the digital video production process (pre-production, production, post-production).

Grade: 12

Prerequisite: Digital Video Technology 3

**DRIVER EDUCATION**

**19003100 - DRIVER EDUCATION CLASS/LAB**

The purpose of this course is to introduce students to the highway transportation system and to provide instruction in strategies that will develop driving knowledge and skills. Course content includes an in-depth study of the scope and nature of accident problems and how to avoid them. In addition, the course discusses the effects of drugs and alcohol while operating a motor vehicle.

Grades: 10, 11, 12

Prerequisite: Eligible for a Learner’s Permit; 15 years of age or older

**EDUCATION AND TRAINING**

**EARLY CHILDHOOD EDUCATION**

**8405110 – EARLY CHILDHOOD EDUCATION 1**

This course includes the following content: child care rules and regulations, safe learning environments, stages of child development, developmentally appropriate practices, and communication skills, principles of child nutrition and technology use; as well as competencies from the DCF 40-hour Introductory Child Care Training coursework.

Grade: 9

Prerequisite: None

**8405120 – EARLY CHILDHOOD EDUCATION 2**

This course covers competencies on professionalism, community resources, the importance of relationship skills and communicating with children’s families, history of school-age child care, infant-toddler developmentally appropriate guidance activities, and observing and recording methods; as well as competencies from the DCF 40-hour Introductory Child Care Training coursework. Students will continue working directly with children 5 years of age or younger to complete the ECPC work experience requirement.

Grade: 10

Prerequisite: Early Childhood Education 1

**8405130 – EARLY CHILDHOOD EDUCATION 3**

This course includes competencies in developing lesson plans, child development theories, factors that affect the development of a child, and developmentally appropriate practices and activities for infants/toddlers, preschoolers, and school-age children. Also covered are components on working with students with special needs, language use & acquisition, emergent literacy, creative expression, classroom management techniques, observation data, and creating optimum environments for all children; as well as competencies from the DCF 40-hour Introductory Child Care Training coursework. Students will continue working directly with school-aged children to complete the ECPC work experience requirement.

Grade: 11

Prerequisite: Early Childhood Education 2

**8405140 – EARLY CHILDHOOD EDUCATION 4**

In this course students will acquire competence in the areas of creating a successful developmentally appropriate curriculum, mentoring, developing recognizing cultural differences when planning activities, community resources, classroom management, pediatric first aid, including children with special needs, recent trends and issues in early childhood education, and professionalism; as well as competencies from the DCF 40-hour Introductory Child Care Training coursework. Students will have completed the ECPC 480-hour work experience requirement by the end of this course.

Grade: 12

Prerequisite: Early Childhood Education 3

### **EXPERIENTIAL EDUCATION**

**1700390/1700400/1700410/1700420 - AVID 1-4**

AVID (Advancement Via Individual Determination) is offered as a rigorous academic elective course that prepares students for success in four-year colleges. The AVID course is scheduled during the regular school day as a year-long course. Each week students receive instruction utilizing a rigorous college preparatory curriculum provided by AVID Center, tutor-facilitated study groups, motivational activities and academic survival skills. There is an emphasis on analytical writing, preparation for college entrance and placement exams, study skills and test taking, note-taking, and research. In AVID, students participate in activities that incorporate strategies focused on writing, inquiry, collaboration, and reading to support their academic growth.

For students new to AVID, or for those with previous experience from middle grades, the ninth grade AVID Elective course will serve as a review of the AVID philosophy and strategies. Students will work on academic and personal goals and communication, adjusting to the high school setting. Students will increase awareness of their personal contributions to their learning, as well as their involvement in their school and community. There is an emphasis on analytical writing, focusing on personal goals and thesis writing. Students will work in collaborative settings, learning how to participate in collegial discussions and use sources to support their ideas and opinions. Students will prepare for and participate in college entrance and placement exams, while refining study skills and test-taking, note-taking, and research techniques. They will take an active role in field trip and guest speaker preparations and presentations. Their college research will include financial topics and building their knowledge on colleges and careers of interest.

Grades: 9, 10, 11, 12

Prerequisite: Application Only

**24003000- LEADERSHIP SKILLS**

The purpose of this course is to teach leadership skills, parliamentary procedure, problem solving, and decision-making, as well as communication skills, group dynamics, time and stress management, public speaking, human relations, team building and other group processes. This class is recommended for current and aspiring student government leaders.

Grades: 9, 10

Prerequisite: None

**0500300/0500310/0500320 - EXECUTIVE INTERNSHIP I, II, III**

The purpose of this course is to provide a practical introduction to the work environment through direct contact with professionals in the community. Students apply textbook learning, leadership skills and understanding in challenging and creative professional areas.

Grade: 11, 12

Prerequisite: Administrative Approval

**HEALTH SCIENCE****ELECTROCARDIOGRAPH TECHNICIAN****8417100– HEALTH SCIENCE ANATOMY & PHYSIOLOGY**

This course is part of the secondary Health Core consisting of an overview of the human body, both structurally and functionally with emphasis on the pathophysiology and transmission of disease. Medical terminology is an integral part of the course.

Grades: 9, 10

Prerequisite: None

**8417110 – HEALTH SCIENCE FOUNDATIONS**

This course is part of the Secondary Health Core designed to provide the student with an in-depth knowledge of the health care system and associated occupations. Emphasis is placed on communication and interpersonal skills, use of technology, ethics and the development of critical thinking and problem-solving skills. Students may shadow professionals throughout the course.

Grades: 10, 11

Prerequisite: Health Science Anatomy & Physiology

**8427130 – ELECTROCARDIOGRAPH TECHNICIAN 3**

This course prepares students to be employed as Electrocardiograph Technicians. Content includes, but is not limited to, a foundation in the cardiovascular system, safety measures for the individual, co-workers and patients as well training in the appropriate theories and instruments used by an Electrocardiograph Technician.

Grades: 11, 12

Prerequisite: Health Science Foundations

**PHARMACY TECHNICIAN****8418210 – PHARMACY TECHNICIAN 1**

The Health Science Core is a core of basic knowledge necessary for any health occupations career. This health core is encompassed inside of this course. Students who complete this course do not have to repeat the Health Science Core at any level. Students must have completed or be concurrently enrolled in the course to move onto OCP B.

Grade: 9

Prerequisite: None

**8418220/8418230 – PHARMACY TECHNICIAN 2 and 3**

These courses build on the knowledge and skill obtained in Pharmacy Technician 1, while also exploring the medical and legal considerations in pharmaceutical careers. Students will learn integral administrative procedures required of pharmacy technicians while applying knowledge of basic pharmaceutical chemistry and drug classification.

Grade: 10

Prerequisite: Pharmacy Technician 1



**8418240/8418250 – PHARMACY TECHNICIAN 4 and 5**

These courses build on the knowledge and skills obtained in Pharmacy Technician 1, 2 and 3. This course focuses on pharmaceutical chemistry and its relationship with human physiology. Students will explore vital theories to better ensure patient safety and satisfaction.

Grade: 11

Prerequisite: Pharmacy Technician 2 and 3

**8418260/8418270 – PHARMACY TECHNICIAN 6 and 7**

These courses build on the knowledge and skills obtained in Pharmacy Technician 1, 2, 3, 4 and 5. Students will learn how to properly prepare sterile products for patients by considering common medical errors and applying detailed knowledge of quality control techniques, drug incompatibilities and the storage and disposal of controlled substances.

Clinical (externship) in the hospital setting will expand the student's knowledge of science and medicine as it relates to the professions associated with the practice of pharmacy in hospitals and family health centers. Students will interact with pharmacists and technicians and patients to provide services in all types of patient care settings including inpatient, outpatient and ambulatory care.

Students are expected to participate in a clinical pharmacy experience that provides opportunities for each student to build on acquired knowledge and skills, to practice and develop skills in selected procedures. Such procedures include, but are not limited to, dispensing, compounding, inventory handling and control, drug distribution, processing of third party claims, maintenance of patient profiles and interaction and communication with pharmacy staff.

Grade: 12

Prerequisite: Pharmacy Technician 4 and 5

## INFORMATION TECHNOLOGY

### WEB DEVELOPMENT

**9001110 – FOUNDATIONS OF WEB DESIGN**

This course is designed to provide students with opportunities to acquire and apply foundational skills related to web design.

Grades: 9, 10, 11, 12

Prerequisite: Digital Information Technology

**9001120 – USER INTERFACE DESIGN**

This course provides advanced concepts used in interface design. The content includes principles of Human Computer Interface (HCI), advanced page design using Cascading Style Sheets (CSS), advanced HTML commands, multimedia applications, Internet/Intranet tools, and website promotion.

Grades: 10, 11, 12

Prerequisite: Foundations of Web Design

**9001130 – WEB SCRIPTING FUNDAMENTALS**

This course provides an introduction to scripting related to web development. The content primarily focuses on client-side scripting using JavaScript

Grades: 11, 12

Prerequisite: User Interface Design

### GAME/SIMULATION/ANIMATION PROGRAMMING

**8208110 – GAME AND SIMULATION FOUNDATION/GAME 1**

This course is designed to study different genres of games, history of games and simulation, where is gaming and simulation going, marketing strategies, design and build different games. Resources: "Gamemaker" magazine - free game making program, various web sites, books, gaming systems.

Grades: 9, 10

Prerequisite: None



**8208120 - GAME AND SIMULATION DESIGN/GAME 2**

This course covers fundamental principles of designing a game or simulation application, in particular Human Computer Interface (HCI) principles, rules and strategies of play, conditional branching, design and development constraints, the use of sound and animation, design tools, and implementation issues. The content includes market research, product design documentation, storyboarding, proposal development, and presentation of a project report. Emphasis is placed on the techniques needed to develop a well-documented, structured game or simulation program.

Grades: 10, 11, 12

Prerequisite: Game and Simulation Foundation

**8208330 - GAME AND SIMULATION PROGRAMMING/GAME 3**

This course will delve deeper into the code programming skills necessary to code games and simulations. Environments like Visual C# and a gaming engine will be used to enhance the students' knowledge of coding allowing them to write more involved games or simulations.

Grades: 11, 12

Prerequisite: Game and Simulation Design

**8208340 - MULTI-USER GAME & SIMULATION PROGRAMMING/GAME 4**

This course is focused on students acquiring the appropriate programming skills for rendering a game or simulation product, including program control, conditional branching, score-keeping, timed event strategies and methodologies, and implementation issues specific to multi-user game/simulation products.

Grade: 12

Prerequisite: Game and Simulation Programming

**LANGUAGE ARTS ELECTIVES****1007330 – DEBATE 1**

The purpose of this course is to develop students' beginning awareness, understanding, and application of language arts as they apply to oral communication concepts and strategies for public debate in a variety of given settings.

Grades: 9, 10, 11, 12

Prerequisite: None

**1007340 – DEBATE 2**

The purpose of this course is to continue to develop students' awareness, understanding, and application of language arts as they apply to oral communication concepts and strategies for public debate in a variety of given settings. Some work outside of the regular school day may be required.

Grades: 10, 11, 12

Prerequisite: Debate 1

**MUSIC**

*(All courses fulfill the fine arts requirement for graduation.)*

**Instrumental Music****13023000 - BAND I (Band introduction)**

This course develops musical skills in band instrumental performance. Content includes development of characteristic tone, technique, scales, phrasing, rhythmical technique, and musical terms. The student's performance at practices, parades, special performances, football games, and competitions may be used in determining the grade in this course.

Grades: 9, 10, 11, 12

Prerequisite: None

**13023100/13023200/13023300 - BAND 2-4**

This course develops musical skills in band instrumental performance. Content includes development of characteristic tone, further development of scales, music reading, sight-reading, more advanced rhythmic studies, and form. The student's performance at practices, parades, special performances, football games, and competitions may be used to determine the grade in this course.

Grades: 9, 10, 11, 12

Prerequisite: Successful completion of sequential class

**13023400/13023500 – BAND 5-6 HONORS**

This course includes the development of advanced instrumental ensemble techniques and skills, extended music literacy and theory, and deep aesthetic engagement. Musical independence and leadership are particularly encouraged in this setting. Extra rehearsals and performance are required and students must serve as members of the marching band.

Grades: 11, 12

Prerequisite: Successful completion of Band IV, Teacher Placement

**13024200 – INSTRUMENTAL TECHNIQUES**

The purpose of this course is to help students enhance their skill set on the drums and other percussion instruments.

Grades: 9, 10, 11, 12

Prerequisite: Teacher Placement

**1302460/1302470/1302480/1302490 – INSTRUMENTAL ENSEMBLE 1-4**

Students with instrumental ensemble experience continue building musicianship and performance skills through the study of high-quality music in diverse styles. Student musicians learn to self-assess and collaborate as they rehearse, perform, and study relevant musical styles and time periods. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course may also require students to obtain a musical instrument (e.g., borrow, rent, purchase) from an outside source.

Grades: 9, 10, 11, 12

Prerequisite: Teacher Placement

**13025000/13025100/13025200/13025300 - JAZZ ENSEMBLE 1-4**

This course is for advanced instrumental musicians who wish to further their music through diverse music compositions. Musical independence and leadership are key for this course. Performance required.

Grades: 9, 10, 11, 12

Prerequisite: Successful completion of Band 1, Teacher Placement

**1301360 - KEYBOARD 1**

Students build fundamental piano techniques while learning to read music, acquire and apply knowledge of basic music theory, and explore the role of keyboard music in history and culture. Beginning pianists develop skills in analytical listening and explore musical creativity in the form of basic improvisation and basic composition. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom.

Grades: 9, 10, 11, 12

Prerequisite: None

**1301370/1301380 - KEYBOARD 2-3**

Students further develop advanced knowledge of piano techniques, musical literacy, solo and ensemble performance skills, and related musical knowledge, using a variety of advanced piano literature. Students explore the historical influence keyboards have had on music performance and composition, and apply criteria to assess their own and others' piano performances. Students extend their knowledge of music technology (i.e., MIDI keyboards) and its connection to the computer and other sound-generating devices. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom.

Grades: 10, 11, 12

Prerequisite: Successful completion of sequential class

**Vocal Music****13033000 - CHORUS I**

This course provides students with experiences in basic vocal production techniques and part-singing. Content includes enabling students to develop basic fundamental skills in vocal tone production and choral performance techniques.

Grades: 9, 10, 11, 12

Prerequisite: None

**13033100/13033200/1303330 - CHORUS II-IV**

The purpose of this course is to enable students to develop intermediate-level individual and ensemble skills in choral performance through preparation of varied high school literature. Emphasis is placed on healthy and expressive singing, accurate interpretation of notation, and development of critical and aesthetic response to music.

Grades: 9, 10, 11, 12

Prerequisite: Successful completion of sequential course

**1303360/1303370/1303380/1303390 – CHORUS REGISTER-SPECIFIC 1-4**

Students with prior choral or vocal instruction focus on developing skills to perform high-quality literature with singers in a similar vocal range. Through two- and three-part music, students build musicianship and choral ensemble skills. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom.

Grades: 9, 10, 11, 12

Prerequisite: Teacher Placement

**1303450/1303460/1303470 – VOCAL ENSEMBLE 2-4 (4 – Honors)**

Students with previous vocal ensemble experience continue building musicianship and performance skills through the study of high-quality music in diverse styles. Student musicians learn to self-assess and collaborate as they rehearse, perform, and study relevant musical styles and time periods. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom.

Grades: 9, 10, 11, 12

Prerequisite: Teacher Placement



**1303400/1303410/1303420/1303430 – VOCAL TECHNIQUES 1-4 (4- Honors)**

Students continue to develop musical and technical skills on a specific voice through developmentally appropriate solo literature, etudes, scales, and exercises. Through problem-solving, critical thinking, and reflection, students develop the physical and cognitive skills necessary to be more disciplined performers. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom.

Grades: 9, 10, 11, 12

Prerequisite: Teacher Placement

**PHYSICAL EDUCATION**

*(All physical education classes require that students dress for exercise.)*

**15013000 – PERSONAL FITNESS**

The purpose of this course is to develop healthy behaviors that influence lifestyle choices for students. The content includes fitness and health concepts, wellness and nutrition plans, safety and injury prevention, mental and emotional health, stress management, disease prevention, tobacco, alcohol, drug use and abuse, and teen pregnancy prevention.

Grades: 9, 10, 11, 12

Prerequisite: None

**15024100/15024200 - INDIVIDUAL AND DUAL SPORTS 1-3**

The purpose of this course is to enable students to develop knowledge and skills in specified individual and dual sports and to maintain or improve personal fitness. The content includes the following safety practices, rules, terminology, and etiquette, history, biomechanical and physiological principles, techniques and strategies, and fitness assessment.

Grades: 9-12

Prerequisite: None

**15033500/15033600 - TEAM SPORTS I and II**

This provides students with opportunities to acquire knowledge of team sports play, develop skills in selected team sports, and maintain or improve personal fitness. Content includes rules and safety practices necessary to participate in selected team sports.

Grades: 9, 10, 11, 12

Prerequisite: None

**15013400/15013500- WEIGHT TRAINING I and II**

The purpose of this course is to help students acquire basic knowledge and skills in weight training that may be used in physical fitness pursuits. The course is designed to improve muscular strength and endurance, and to enhance body image. The students are required to set up their own program in nutrition, stretching, and strength and demonstrate improvements over a given period of time.

Grades: 10, 11, 12

Prerequisite: None

**15013600 - WEIGHT TRAINING III**

This course involves reinforcement of basic weight training, knowledge of safety practices, application of knowledge of designing and implementing a personal weight-training program to meet specific needs and goals, and knowledge of the organization and administration of weight lifting activities.

Grades: 11, 12

Prerequisite: Weight Training I and II

**15014100 - POWER WEIGHT TRAINING I**

The purpose of this course is to enable students to acquire basic knowledge and skills in power weight training and to maintain or improve personal fitness. Content includes safety practices, rules and terminology, techniques and strategies, biomechanical and physiological principles, as well as fitness assessment.

Grades: 12

Prerequisite: Teacher placement

**STEM (SCIENCE, TECHNOLOGY, ENGINEERING, MATHEMATICS)****02003350 – AP COMPUTER SCIENCE PRINCIPLES**

AP Computer Science Principles introduces students to the central ideas of computer science, instilling the ideas and practices of computational thinking, and inviting students to understand how computing changes the world. Students develop innovative computational artifacts using the same creative processes artists, writers, computer scientists, and engineers use to bring ideas to life.

Grades: 10, 11, 12

Prerequisite: None

**ENGINEERING PATHWAYS****86005500 - INTRODUCTION TO ENGINEERING DESIGN**

This course teaches problem-solving skills using a design development process. Models of product solutions are created, analyzed, and communicated using solid modeling computer design software.

Grades: 9, 10

Prerequisite: Successful completion of Algebra 1 or teacher placement

**86005200 - PRINCIPALS OF ENGINEERING**

This course helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change.

Grades: 10, 11, 12

Prerequisite: Introduction to Engineering Design

**86006590 – CIVIL ENGINEERING & ARCHITECTURE**

This course is designed to give a clear understanding of Civil Engineering and Architecture, the study of the design and construction of residential and commercial building projects. The course includes an introduction to many of the varied factors involved in building design and construction including building components and systems, structural design, storm water management, site design, utilities and services, cost estimation, energy efficiency, and careers in the design and construction industry.

Grade: 11, 12

Prerequisite: Principals of Engineering

**THEATRE**

*(All courses fulfill fine arts requirement for graduation.)*

**0400310 - THEATRE 1**

Explores the basics of theater, including drama appreciation, script interpretation, drama history, stagecraft, and playwriting. This course develops the budding actor's confidence and skills with improvisation, pantomime, and character work. All students must keep a notebook.

Grades: 9, 10, 11, 12

Prerequisite: None

**0400320/0400330/0400340 – THEATRE 2-4 (3-4 – Honors)**

This course is designed for students with extensive experience in theatre, and promotes significant depth of engagement and lifelong appreciation for theatre through a broad spectrum of primarily self-directed study and performance. In keeping with the rigor expected in an accelerated setting, students assemble a portfolio that showcases a significant body of work representing personal vision and artistic growth over time; mastery of theatre skills and techniques in one or more areas; and evidence of sophisticated oral and written analytical and problem-solving skills based on their structural, historical, and cultural knowledge.

Grades: 10, 11, 12

Prerequisite: Successful completion of sequential course

**0400410– TECHNICAL THEATRE DESIGN& PRODUCTION 1**

Students regularly reflect on aesthetics and issues related to and addressed through theatre, and create within various aspects of theatre. Student designers and technicians assemble a portfolio that showcases a body of work representing artistic growth over time; growing command of theatre skills and techniques in one or more areas; and evidence of significant oral and written analytical and problem-solving skills. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend or participate in technical work, rehearsals, and/or performances beyond the school day to support, extend, and assess learning in the classroom.

Grades: 9, 10, 11, 12

Prerequisite: None

**0400420/0400430/0400440 – TECHNICAL THEATRE DESIGN& PRODUCTION 2-4 (4 Honors)**

Students regularly reflect on aesthetics and issues related to and addressed through theatre, and create within various aspects of theatre. Student designers and technicians assemble a portfolio that showcases a body of work representing artistic growth over time; growing command of theatre skills and techniques in one or more areas; and evidence of significant oral and written analytical and problem-solving skills. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend or participate in technical work, rehearsals, and/or performances beyond the school day to support, extend, and assess learning in the classroom.

Grades: 10, 11, 12

Prerequisite: Successful completion of sequential course



**WORLD LANGUAGES****07083400 - SPANISH I**

This course will develop listening, speaking, reading, and writing skills, including pronunciation and oral communication in the Spanish language. After completing this course, the student will be able to understand a basic conversation with a nonnative Spanish speaker and be able to communicate simple and personal information, verbally and in writing. This course will empower the student with a basic knowledge of the Spanish culture.

Grades: 9, 10, 11

Prerequisite: None

**07083500 - SPANISH II**

This course will reinforce the fundamental skills acquired by the students in Spanish I, including grammatical construction of the Spanish language. After completing this course, the student will be able to understand an intermediate conversation with a nonnative Spanish speaker and be able to communicate basic information verbally and in writing. This course will also empower the student with a general knowledge of the Spanish culture.

Grades: 9, 10, 11, 12

Prerequisite: Successful completion of Spanish I

**07083600 - SPANISH III Honors**

This course will enhance the skills acquired in Spanish I and II. After completing this course, the student will be able to understand an intermediate conversation with a native Spanish speaker and be able to communicate using structures that are more advanced verbally and in writing. Intensive use of vocabulary for comprehension is an integral part of this class.

Grades: 9, 10, 11, 12

Prerequisite: Successful completion of Spanish II

**07084000 - ADVANCED PLACEMENT SPANISH LANGUAGE & CULTURE**

The purpose of this course is to develop oral and written fluency in the language. The student will be able to understand a lecture in Spanish and participate actively in a discussion of a literary topic. Students will read modern Spanish and Hispanic-American literature in all genres. In addition, students will analyze the form and content of literary work, critically, orally and in writing. College credit can be earned by successful performance (3 or better) on the Advanced Placement exam in May.

Grades: 10, 11, 12

Prerequisite: Successful completion of Spanish III Honors

**07084010 - ADVANCED PLACEMENT SPANISH LITERATURE & CULTURE**

AP Spanish Literature is equivalent to a college level introductory survey course of literature written in Spanish. Students continue to develop their interpretive, interpersonal, and presentational skills in Spanish language as well as critical reading and analytical writing as they explore short stories, novels, plays, essays, and poetry from Spain, Latin America, and U.S. Hispanic authors along with other non-required texts. College credit can be earned by successful performance (3 or better) on the Advanced Placement exam in May.

Grades: 11, 12

Prerequisite: Successful completion of AP Spanish Language and Culture

**0701320 – FRENCH 1**

French 1 introduces students to the target language and its culture. The student will develop communicative skills in all 3 modes of communication and cross-cultural understanding. Emphasis is placed on proficient communication in the language. An introduction to reading and writing is also included as well as culture, connections, comparisons, and communities.

Grades: 9, 10, 11, 12

Prerequisite: None

**0701330 – FRENCH 2**

French 2 reinforces the fundamental skills acquired by the students in French 1. The course develops increased listening, speaking, reading, and writing skills as well as cultural awareness. Specific content to be covered is a continuation of listening and oral skills acquired in French 1. Reading and writing receive more emphasis, while oral communication remains the primary objective. The cultural survey of the target language-speaking people is continued.

Grades: 10, 11, 12

Prerequisite: Successful completion of French I

**RESOURCES FOR SUCCESS**

If you are having difficulty in a class, please make sure that you speak with your teacher and use the following resources:

- 1) After School Tutoring - See the Liberty website or inquire in the Guidance office
- 2) FOCUS is a useful tool to check grades and upcoming assignments. Your username is your ID number and your password is your computer login for the student computers at LHS.
- 3) Khan Academy – [www.khanacademy.org](http://www.khanacademy.org)  
Khan Academy offers practice exercises, instructional videos, and a personalized learning dashboard that empower learners to study at their own pace in and outside of the classroom. Khan Academy can assist students for SAT prep and math support, among many other subject areas.







## CAREER PATHWAYS

In the Osceola School District, Career Pathways are designed to provide students a seamless pathway from middle school, through high school, and into post-secondary education. Post-secondary education might include a university, state college, technical school, or apprenticeship. A Career Pathway prepares students for success in each of these options; the correct option after high school is best determined by the student's career plans.

Students begin their middle school years with introductory and exploratory classes in careers. Once in high school, students can continue in classes and programs that provide specific training toward a desired career. These programs prepare students to enter the appropriate college, technical institute, or entry-level job in their chosen career; often with a recognized industry certification and/or a Florida Gold Seal Vocational Scholars Award.

In addition, students who complete a Career Pathway program develop the employability and technical skills required by employers in today's globally competitive marketplace.

**Liberty High School provides a wide variety of Career Pathways (Career and Technical Education or CTE) programs for students. Many programs offer special benefits to students.**

### **CAREER ACADEMIES**

A Career Academy is a small learning community within a high school that provides rigorous and relevant instruction focused on preparation for both the workplace and college. It goes beyond traditional Career and Technical Education to integrate academic and technical curricula, raise student ambitions, increase career options, and provide a meaningful learning context for all students.

Academies combine a college-preparatory curriculum with a career theme. Academic courses are linked with technical courses that focus on the academy's field of work.

A Career Academy is comprised of a cluster of students who have some of the same teachers for at least two years, and who share several classes each year.

Career Academies collaborate with local businesses and help provide work-based experiences for Academy students.

### **POST- SECONDARY ARTICULATION**

Many Career Pathway courses and programs provide students the opportunity to gain free college credit from Valencia Community College or free course acceleration from the Technical Education Center of Osceola (TECO). Industry Certification can also provide opportunity for free college credit from some state universities.

To participate in this articulation process, students should talk with their CTE teacher to find out the specific requirements for their program.

Career Cluster	Program		9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
Health Science	Pharmacy Technician (GSV)	Course Number	8418210	8418220	8418230	8418240
		Course Name	Pharmacy Technician 1	Pharmacy Technician 2 Pharmacy Technician 3	Pharmacy Technician 4 and Pharmacy Technician 5	Pharmacy Technician 6 and Pharmacy Technician 7
		Industry Certification				NREMT003 PTCBD001 (GS CAPE – 9 HOURS!!!)
Health Science	Electrocardiograph Technician (GSV)	Course Number		8417100	8417110	8427130
		Course Name		Health Science Anatomy & Physiology	Health Science Foundations	Electrocardiograph Technician 3
		Industry Certification			NATHA002	NATHA002
Arts, A/V Tech, and Communication	Digital Design (GSV)	Course Number	8207310	8209510	8209520	8209530
		Course Name	Digital Information Technology	Digital Design 1	Digital Design 2	Digital Design 3
		Industry Certification	MICRO069	ADOBE022	ADOBE022	ADOBE022
Arts, A/V Tech, and Communication	Digital Video Technology (GSV)	Course Number	8201410	8201420	8201430	8201440
		Course Name	Digital Video Technology 1	Digital Video Technology 2	Digital Video Technology 3	Digital Video Technology 4
		Industry Certification	ADOBE018 ADOBE022	ADOBE018 ADOBE022		
Information Technology	Game/Simulation/ Animation Programming (GSV)	Course Number	8208110	8208120	8208330	
		Course Name	Game & Simulation Foundations	Game & Simulation Design	Game & Simulation Programming	
		Industry Certification	ADOBE022	ADOBE022	ADOBE022	

Career Cluster	Program		9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
Information Technology	Web Development (GSV)	Course Number	8207310	9001110	9001120	9001130
		Course Name	Digital Information Technology	Foundations of Web Design	User Interface Design	Web Scripting Fundamentals
		Industry Certification	MICRO069	ADOBE010		ADOBE010
Business Management and Administration	Promotional Enterprise (GSV)	Course Number	8207310	8217110	8217120	8217130
		Course Name	Digital Information Technology	Custom Promotional Layout Design	Promotional Design Management	Custom Promotion Sales and Distribution Management
		Industry Certification	MICRO069	ADOBE020	ADOBE020	ADOBE020
Education & Training	Early Childhood Education (GSV)	Course Number	8405110	8405120	8405130	8405140
		Course Name	Early Childhood Education 1	Early Childhood Education 2	Early Childhood Education 3	Early Childhood Education 4
		Industry Certification				CPREC001
Engineering & Technology Education	Engineering Pathways(GSV)	Course Number	8600550	8600520	8600590	
		Course Name	Introduction to Engineering	Principles of Engineering	Civil Engineering and Architecture	
		Industry Certification		ADESK011 (GS CAPE)	ADESK011 (GS CAPE)	
Agriculture, Food & Natural Resources	Horticulture Science & Services (GSV)	Course Number	8106810	8121510	8121520	
		Course Name	Agriscience Foundations 1	Introductory Horticulture 2	Horticulture Science 3	
		Industry Certification		FNGLA001		